Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1.   (Currently amended) A method in a data processing system for dynamically selecting software buffers for aggregation in order to optimize system performance, said method comprising:

receiving data to be transferred to a device, said data being stored in a chain of software buffers;

determining current characteristics of said system; [[and]]

dynamically selecting ones of said software buffers to combine that will maximize performance of said system while said data is being transferred[[.]];

determining a threshold that has been assigned to an I/O adapter that is to be used to receive said data;

evaluating a first buffer in said chain;

determining whether said first buffer is larger than said threshold;

in response to a determination that said first buffer is larger than said threshold, leaving said first buffer unchanged and creating a new chain of buffers that includes said unchanged first buffer; and

in response to a determination that said first buffer is not larger than said threshold, combining said first buffer with a second buffer in said chain to create a new buffer that is a combination of said first buffer and said second buffer, and creating a new chain of buffers that includes said new buffer instead of either said first or said second buffer.

2.   (Currently amended) The method according to claim 1, wherein ~~further comprising the steps of:~~

determining current characteristics of said system includes ~~including~~ determining direct memory access (DMA) capabilities and processor capacity of said system, wherein said DMA capabilities and processor ~~process~~ capacity are said current characteristics.

3.   (Currently amended) The method according to claim 1, further comprising the step [[steps]] of:

generating said [[a]] new chain of buffers that includes an aggregation of said selected ones of said software buffers.

4.   (Currently amended) The method according to claim 1, further comprising the step [[steps]] of:

setting said [[a]] threshold for each combination of I/O adapter, slot size, and system characteristics.

5-6.   (Canceled)

7.   (Currently amended) The method according to claim 1 [[6]], further comprising the step [[steps]]
of:

    transmitting said data using said new chain instead of said chain.

8-20.   (Canceled)

21.   (Currently amended) ~~The method according to claim 1, further comprising:~~
    <u>A method in a data processing system for dynamically selecting software buffers for aggregation
in order to optimize system performance, said method comprising:</u>
    <u>receiving data to be transferred to a device, said data being stored in a chain of software buffers;</u>
    <u>determining current characteristics of said system;</u>
    <u>dynamically selecting ones of said software buffers to combine that will maximize performance
of said system while said data is being transferred;</u>
    determining a threshold that has been assigned to an I/O adapter that is to be used to receive said
data;
    evaluating a first buffer in said chain;
    determining whether said first buffer is larger than said threshold;
    in response to a determination that said first buffer is larger than said threshold, leaving said first
buffer unchanged; and
    in response to a determination that said first buffer is not larger than said threshold, replacing said
first and said second buffers in said chain with an aggregated buffer which is a combination of said first
and said second buffers.